

Silviculture:

The Society of American Foresters defines silviculture as “The science and art of cultivating forest crops...the theory and practice of controlling the establishment, composition, and growth of forests.” The silviculture prescriptions performed by Erie County should connect with our forest management objectives. In the final analysis, Erie County’s methods will promote rapid tree growth and respect other objectives such as watershed protection, wildlife habitat improvement, and urban interfacing (fire protection).

A silvicultural prescription is written direction for treatment. It should contain a rationale for tree improvements, timber harvest, watershed protection improvements, wildlife habitat enhancement and any other objectives, where appropriate. Elements of a silvicultural prescription include:

1. Site data:

- Geology
- Rock type
- Slope
- Climate and exposure
- Soils
- Watershed
- Snow storage and melt
- Potential vegetation
- Animal and plant biodiversity
- Archeological features (every forest is a possible archeological site)
- Drainage pattern
- Runoff and infiltration
- Topography
- Hydrologically sensitive areas

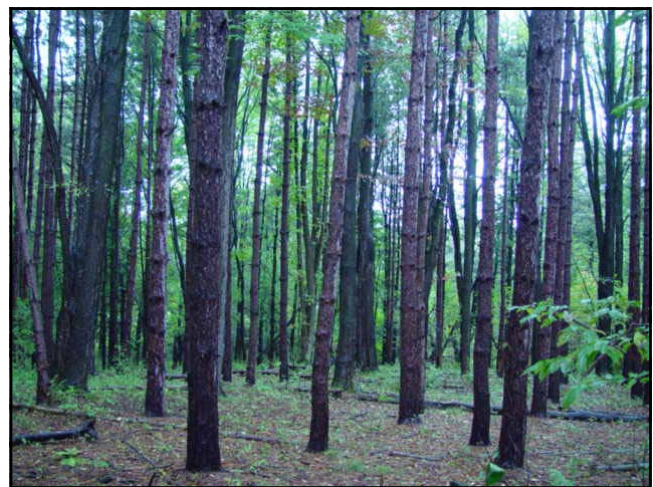
2. Stand data:

- Timber stand resources
- Species composition
- Age and vigor
- Growth rates
- Quality
- Stocking levels
- Protection from wildfire
- Insects and diseases
- Weather factors
- Wildlife habitat
- Cover types
- Water characteristics and access
- Water supply
- Visibility from travel corridors
- Recreational uses
- Even or uneven age arrangement

3. Data analysis and diagnosis: The collection of site data and stand data will be analyzed. From this, Erie County can develop:

- Stand tables
- Accurate stand maps
- Tree improvement and harvesting schedules
- Strategies for enhancing wildlife habitat

Finally, stewardship recommendations with silvicultural prescriptions for each Erie County Lot will follow, since each Lot has unique characteristics.



An even-aged conifer plantation with hardwood succession throughout the understory.